Application Success
Mobile Off-road

BIJUR DELIMON
INTERNATIONAL

BDI Products

+ TTN Injector Lubricator
+ CXL Injectors & Manifolds
+ FLM Injectors
+ SMDC Controller

Application Overview

Used on Volvo L220F wheel loader.

Why Automatic Lubrication?

These loaders run all day long and to perform manual lubrication would require too much down time.

Advantages

+ The lubrication system greases every point while loader is running
+ Regular timed applications of grease to the lubrication points prevent water and ash from entering
+ Local distribution and support
+ Cost effective system
+ Lower costs for repair parts
+ High level of reliability
+ All system components from one source

Please contact factory for additional information on this or any other application.

Products Utilized for Volvo L220F Wheel Loader

TTN Injector Lubricator

+ **Description:** 24 VDC, 4 liter (8 lb) reservoir, with a low level switch, used with a SMDC Controller

The TTN Injector Lubricator is capable of pumping up to NLGI grade 2 grease at a pressure of 3600 psi (248 bar). The TTN Injector Lubricator is an automatic, electric lubricator available in either 12 or 24 VDC motor voltages. Inside the reservoir, a spring-loaded bellows forces grease into the pump housing assuring reliable delivery with each lubrication cycle.

CXL Injectors

+ **Description:** 4 and 6 outlet injector manifolds

With a wide selection of discharge rates available, these positive displacement injectors deliver a precise amount of grease to lubrication points. Manifolds are available in various configurations ranging from 2 to 12 outlets (single and double row), allowing you to lubricate many points from a single location. CXL Injectors are protected with a Dacromet coating that is rated up to 1000 hours in salt spray testing.

FLM Injectors

+ **Description:** 3 and 6 outlet injector manifolds

FLM Injectors are positive displacement grease dispensing valves. Higher injector outputs and proprietary surface coating make these units well suited to satisfy lubrication needs of medium and large off-road machinery operating in harsh environments.

SMDC Controller

+ **Description:** Part #33346M with external terminal strip connections

The SMDC Controller is a multi-purpose programmable controller used with on-board mobile lubrication systems. The unit is energized by the vehicle or machine's ignition switch. Controller settings are saved whenever power is interrupted. Up to four operating modes can be selected which allows the controller to be used with various lubrication system designs. A voltage selector switch is located inside the enclosure for both 12 and 24 VDC service.

Typical System Layout

At the power generating plant, on a Volvo L220F wheel loader, they use a TTN Injector Lubricator without a controller and have a SMDC Controller mounted inside the cab. There are 3 banks of FLM-A series injectors and 2 banks of CXL Injectors mounted throughout the machine. FLM-A's are used on the front where the demand for grease is considerably higher than the articulated section, especially since the bucket pins see a lot of water as well. Lubrication intervals are set for every 8 minutes and there are a total of 29 lubrication points. High pressure hose was used to expedite installation.

Background

These loaders are used to move the ash throughout the yard of this Pennsylvania coal generating plant and to load trucks. It is a very severe environment because the ash is light and tends to get blown into tight crevices such as hinge pins and other pivot points on the loaders.

Please contact factory for additional information on this or any other application.

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